



VIPER

CLASS RULES

2010



The Viper was designed in 2007 by Greg Goodall and was adopted as a Recognised class in 20xx.

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INTRODUCTION

The Viper Class has been created as a strict one-design catamaran where the true test when raced is between crews and not boats and equipment. The fundamental objective of these class rules is to ensure that this concept is maintained.

Viper hulls, hull appendages, tillers, rig and sails shall only be manufactured by the licensed manufacturers. Equipment is required to comply with the Viper Building Specification.

Viper hulls, hull appendages, rig and sails may, after having left the manufacturer, only be altered to the extent permitted in Section C of the class rules.

Owners and crews should be aware that compliance with rules in Section C is NOT checked as part of the manufacturing process.

Rules regulating the use of equipment during a race are contained in Section C of these class rules, in ERS Part I and in the Racing Rules of Sailing.

This introduction is intended to provide a non-binding overview. The Viper Class Rules proper begin on the next page.

PART I – ADMINISTRATION

Section A – General

A.1 LANGUAGE

- A.1.1 The official language of the class is English and in case of dispute over translation the English text shall prevail.
- A.1.2 The word “shall” is mandatory and the word “may” is permissive.

A.2 ABBREVIATIONS

- A.2.1 ISAF International Sailing Federation
- MNA ISAF Member National Authority
- AHPC Australian High Performance Catamarans
- LM Licensed Manufacturer
- ICA International Viper Class Association
- NCA National Viper Class Association
- ERS Equipment Rules of Sailing
- RRS Racing Rules of Sailing

A.3 AUTHORITIES

- A.3.1 The international authority of the class is the ISAF which shall co-operate with AHPC and the ICA in all matters concerning these **class rules**.
- A.3.2 The ICA may declare ineligible any Viper, which does not conform to these **class rules** and the official drawings and specifications held by the ISAF.

A.4 ADMINISTRATION OF THE CLASS

- A.4.1 The class is administered by the ICA which shall co-operate with the AHPC. The ICA may delegate part or all of its administrative functions to an NCA.
- A.4.2 In countries where there is no NCA, or the NCA does not wish to administrate the class, its administrative functions shall be carried out by the ICA in co-operation with the MNA, or by the MNA in co-operation with the ICA.

A.5 ISAF RULES

- A.5.1 These **class rules** shall be read in conjunction with the ERS.
- A.5.2 Except where used in headings, when a term is printed in “**bold**” the definition in the ERS applies and when a term is printed in “*italics*” the definition in the RRS applies.

A.6 CLASS RULES VARIATIONS

- A.6.1 At Class Events – see RRS 89.1(d) – ISAF Regulation 26.5(f) applies. At all other events RRS 86 applies.

A.7 CLASS RULES AMENDMENTS

- A.7.1 Submissions for rule changes may be made in writing by the ICA after consultation with the ICA Rules Committee.
- A.7.2 Amendments to these **class rules** shall only be made subject to approval of ISAF in accordance with the ISAF Regulations.

A.8 CLASS RULES INTERPRETATIONS

A.8.1 Interpretations of **class rules** shall be made in accordance with the ISAF Regulations.

A.9 INTERNATIONAL CLASS FEE AND ISAF BUILDING PLAQUE

A.9.1 The licensed hull builder shall pay the International Class Fee.

A.9.2 ISAF shall, after having received the International Class Fee for the hull, send the ISAF Building Plaque to the licensed hull builder.

A.10 SAIL NUMBERS

A.10.1 Sail numbers shall be issued by AHPC.

A.10.2 Sail numbers shall be issued in consecutive order.

Section B – Boat Eligibility

For a **boat** to be eligible for *racing*, it shall comply with the rules in this section.

B.1 CLASS RULES COMPLIANCE

B.1.1 The boat shall be in compliance with the **class rules**.

B.1.2 In the event of a dispute alleging non-compliance with **class rules** where specific dimensions are not stated, the following procedure shall be adopted:

- a) A sample of the measurements for the disputed item shall be obtained by taking the identical measurement from five boats or items of equipment, which are not the subject of the dispute.
- b) The measurement of the disputed boat or items of its equipment taken using the same technique as above shall be compared to the sample.
- c) If any of the measurements obtained from the disputed boat or item of equipment lie outside the corresponding range of measurements found in the sample, the matter together with the details of the measurement methods and any other relevant information shall be referred to the protest committee.

PART II – REQUIREMENTS AND LIMITATIONS

The **crew** and the **boat** shall comply with the rules in Part II when *racing*. In case of conflict Section C shall prevail.

The rules in Part II are **closed class rules**, where anything not specifically permitted by the **class rules** is prohibited. Any **equipment inspection** shall be carried out in accordance with the ERS except where varied by Part II of these **class rules**.

Section C – Conditions for Racing

C.1 GENERAL

C.1.1 RULES

- (a) RRS 50.4 shall not apply.
- (b) RRS Appendix G1.3 (d) shall not apply.
- (c) RRS 42.3 is changed as follows:
 - Add to RRS 42.3:
 - i) A boat's crew may pump the mainsail repeatedly to release one or more battens.
- (d) The ERS Part I – Use of Equipment shall apply.

C.1.2 LIMITATIONS

- (a) The Viper shall only be raced with original or replacement equipment supplied by AHPC specifically for the Viper, except where otherwise authorized by these **class rules**.
- (b) Where replacement equipment other than from AHPC is authorized, it may be obtained from any supplier provided that the replacement is of a similar weight, size and type and performs the same function.

C.2 ADVERTISING

C.2.1 LIMITATIONS

Advertising shall only be displayed in accordance with the ISAF Advertising Code. (See ISAF Regulation 20)

C.3 CREW

C.3.1 LIMITATIONS

- (a) The **crew** shall consist of 1 or 2 persons.
- (b) The **crew** shall use the **sails** in accordance with the following categories:
 - (1) A 1 person **crew** shall sail with the mainsail and spinnaker.
 - (2) A 2 person **crew** shall sail with the mainsail, jib and spinnaker.
- (c) No **crew** member shall be substituted during an event without prior written permission from the Race Committee.
- (d) In the event of crew substitution, the total **crew** weight shall not be less than the original weight and not more than 10 kg over the original weight, unless approved by the Race Committee.

- (e) All **crew** on a **boat** competing at ICA World or Regional Championships shall be members of the ICA. At all other events at least one **crew** member on board a competing **boat** shall be a member of the ICA unless prescribed otherwise in the Notice of Race.

C.3.2 DIVISIONS

- (a) Single-handed – there shall be 1 **crew** member on board.
- (b) Double-handed – there shall be 2 **crew** member on board.

C.4 PERSONAL EQUIPMENT

C.4.1 MANDATORY

- (a) The boat shall be equipped with a **personal flotation device** for each crew member to the minimum standard ISO 12402-5 (CE 50 Newtons), or USCG Type III, or AUS PFD 2

C.4.2 TOTAL WEIGHT

In accordance with RRS 43.1(b), the total weight of worn equipment shall not exceed 10 kg.

C.5 EQUIPMENT

Replacement or addition of the following items is permitted. Parts may be obtained from any supplier unless otherwise stated.

C.5.1 MANDATORY

(a) FOR USE

- (1) A righting line of minimum diameter 8 mm and minimum length 4 m of line be securely attached and readily accessible from each side of the boat. The righting lines be in addition to all other required equipment.

C.5.2 OPTIONAL

(a) FOR USE

- (1) Compasses or electronic devices that provide timing, heading and heading memory but which do not calculate, transmit, transfer or receive data are permitted including brackets or other ways of attachments. The use of navigation and speed metering equipment is not permitted.
- (2) Water Bottle Holders
- (3) Wind Indicators

(b) NOT FOR USE

- (1) A paddle

C.6 BOAT

C.6.1 MODIFICATIONS, MAINTENANCE AND REPAIR

The following is permitted without the approval of AHPC. Unless stated otherwise items mentioned in this section may be obtained any manufacturer or supplier.

MODIFICATIONS

- (a) Replacements for any **boat** equipment, including but not limited to **hull appendages, rig, sails**, battens, tiller, spinnaker chute or fittings, whether

original or replacements shall be only those produced by the AHPC except where otherwise authorised by this section.

(b)

MAINTENANCE

(c) Replacement of the following items is permitted. Parts shall be of similar specification and may be obtained from any supplier

- (1) Blocks
- (2) Cleats
- (3) Mainsheet swivel base
- (4) Shackles, pins, bobbles
- (5) Inspection hatches
- (6) Tiller extensions

(d) Maintenance may include the replacement of fastenings with alternatives from any supplier, provided that the equipment is replaced in the original position.

REPAIR

- (e) Repairs are permitted; however, an **official measurer** may verify that the external shape is the same as before the repair and that no substantial stiffness, or other, advantage has been gained as a result of the repair
- (f) Any work intended or with the effect of lightening the **boat** or improving, shape or performance beyond the original is not permitted.

C.6.2 DIMENSIONS

	minimum	maximum
Hull Length	-	5000 mm
Boat Beam	-	2500 mm

C.6.3 WEIGHT

	minimum	maximum
The weight of the boat in dry condition excluding optional equipment detailed in C.5.2.	129 kg	-

C.6.4 CORRECTOR WEIGHTS

- (a) **Corrector weights** of lead shall be permanently fastened to the outside of the forward beam when the **boat** weight is less than the minimum requirement. These correctors shall be removable for the purposes of measurement.

C.7 TRAMPOLINE

C.7.1 LIMITATIONS

- (a) Only trampolines as manufactured and supplied by the AHPC are permitted.

C.7.2 CONSTRUCTION

- (a) Storage pockets with closable flaps may be added

- (b) Additional hiking straps may be added.

C.8 HULL

C.8.1 MODIFICATIONS, MAINTENANCE AND REPAIR

The following is permitted without the approval of AHPC. Unless stated otherwise items mentioned in this section may be obtained any manufacturer or supplier.

MODIFICATIONS

- (a) Non slip material of any kind (maximum thickness 5mm) may be added to the deck.
- (b) Wedges or angled pieces may be fitted under cleats
- (c) Calibration marks,
- (d) Not more than four, 154mm diameter inspection hatches may be added.
- (e) Not more than four foot Straps

MAINTENANCE

- (f) Replacement of the following items is permitted. Parts shall be of similar specification and may be obtained from any supplier
 - (1) Blocks
 - (2) Cleats
 - (3) Mainsheet swivel base
 - (4) Shackles, pins, bobbles
 - (5) Inspection hatches
 - (6) Tiller extensions
- (g) Maintenance may include the replacement of fastenings with alternatives from any supplier, provided that the equipment is replaced in the original position.
- (h) Waxing and polishing of the **hulls** is permitted provided the intention and effect is to polish the **hulls** only.

REPAIR

- (i) Repairs are permitted; however, an **official measurer** may verify that the external shape is the same as before the repair and that no substantial stiffness, or other, advantage has been gained as a result of the repair
- (j) Any work intended or with the effect of lightening the **boat** or improving, shape or performance beyond the original is not permitted.
- (k) Repairs and maintenance including but not limited to painting and sanding may be carried out provided repairs are made in such a way that the essential shape, characteristics or function of the original are not affected.

C.8.2 FITTINGS

(a) USE

- (1) All inspection hatch covers shall be kept closed on the water.
- (2) Fittings shall be arranged as supplied by AHPC.

C.9 HULL APPENDAGES

C.9.1 MODIFICATION, MAINTENANCE AND REPAIR

- (a) AHPC. supplied **rudder** assemblies, **rudder** blades and **daggerboards** shall not be modified except for minimum filing to improve fit and function.
- (b) Waxing and polishing of the **hull appendages** is permitted provided the intention and effect is to polish the **hull appendages** only.
- (c) Repairs are permitted; however, an **official measurer** may verify that the external shape is the same as before the repair and that no substantial stiffness, or other, advantage has been gained as a result of the repair.
- (d) Anti-chafing and shimming pads may be added to the **daggerboard** trunk and **rudder** assemblies to improve fit and reduce wear. Shims shall not be used to alter the angle of the **hull appendages**.

C.9.2 LIMITATIONS

- (a) **Rudder** blades, **rudder** assemblies and **daggerboards** shall be as supplied by the AHPC.
- (b) Only two **daggerboards** and two **rudder** blades shall be used during an event, except when an item has been lost or damaged.

C.9.3 DAGGERBOARDS

(a) USE

- (1) Top edge of the **daggerboard** in the down position shall not extend below the level of the deck into **daggerboard** trunk.

C.10 RIG

C.10.1 MODIFICATIONS, MAINTENANCE AND REPAIR

Replacement of the following items is permitted. Parts shall be of similar specification and may be obtained from any supplier:

- (a) Cleats
- (b) Sheave blocks

C.10.2 FITTINGS

The following may be added to the **rig**. Parts may be obtained from any supplier:

- (a) A mechanical wind indication device may be fitted to the top of the **mast** or to the **bowsprit**.

C.10.3 LIMITATIONS

- (a) Only one set of **spars** and standing **rigging** shall be used except when an item has been lost or damaged beyond repair.
- (b) The **mast** shall not be altered in any way except for the attachment of fittings and equipment.

C.10.4 MAST

(a) USE

- (1) A preventer or otherwise known as a positive mast rotator, may be added to keep the mast in rotation, and may be rigged in any manner.

C.10.5 BOWSPRIT

(a) USE

Standing **rigging** shall be arranged as supplied by AHPC

(b) DIMENSIONS

	minimum	maximum
Bowsprit Length	-	342 mm
Bowsprit diameter	40 mm	-
Bowsprit wall thickness	1.5 mm	-

C.10.6 STANDING RIGGING

Replacement of the standing **rigging** is permitted. Parts may be obtained from any supplier provided it meets the following specifications:

(a) USE

Standing **rigging** shall be arranged as supplied by AHPC

(b) DIMENSIONS

	minimum	optional
Shrouds, Forestay , Forestay bridles, diamond wires	3.0 mm	-
Trapeze Wires	2.0 mm	2.5 mm

(c) CONSTRUCTION

	mandatory	optional
Shrouds, Forestay , Forestay bridles, diamond wires	1x19 wire	-
Trapeze Wires	1x19 wire	Dyneema

C.10.7 RUNNING RIGGING

Replacement of the running **rigging** is permitted. Parts shall be of similar specification and may be obtained from any supplier provided it is of equal strength or better than AHPC supplied components.

(a) USE

- (1) Running **rigging** may be arranged at the discretion of the **crew**
- (2) Spinnaker sheet blocks and mounting is open and additional blocks may be added.

C.11 SAILS

C.11.1 MODIFICATIONS, MAINTENANCE AND REPAIR

- (a) **Sails** shall not be altered in any way except as permitted by these **class rules**.
- (b) Routine maintenance and repairs are permitted provided the size and shape are not altered.
- (c) Logos may be inserted into spinnakers provided this process does not alter the size or shape

C.11.2 LIMITATIONS

- (a) Not more than 1 mainsail, 1 jib, and 1 spinnaker shall be carried aboard.

- (b) 1 mainsail, 1 jib and 1 spinnaker shall be used during an event, except when a sail has been lost or damaged beyond repair. Such replacement may be made only with the approval of the race committee.
- (c) Tell tales are permitted.

C.11.3 DIMENSIONS

	minimum	maximum
Mainsail area		15.0m ²
Jib area		4.15m ²
Spinnaker area		17.5m ²

C.11.4 MAINSAIL IDENTIFICATION

- (a) The sail number shall be displayed on each side of the mainsail in accordance with the RRS Appendix G.
- (b) The Class Insignia shall be as prescribed by AHPC, and shall be displayed near the head.

Section D – Hull

D.1 PARTS

D.1.1 MANDATORY

- (a) Hulls
- (b) Cross Beams

D.2 GENERAL

D.2.1 RULES

- (a) The **hull** shall comply with the **class rules** in force at the time of manufacture.

D.2.2 MODIFICATIONS, MAINTENANCE AND REPAIR

- (a) The **hulls** and beams shall not be altered in any way except as permitted by Section C of these **class rules**.
- (b) If any **hull** moulding is repaired in a way other than that described in Section C, it shall be carried out by a licensed builder. The external shape shall remain the same as before the repair and no substantial stiffness, or other advantage shall be gained as a result of the repair.

D.2.3 IDENTIFICATION

- (a) The **hull** shall carry the ISAF Plaque permanently placed on the transom.

D.2.4 BUILDERS

- (a) The **hull** shall be built by a manufacturer licensed by the AHPC to produce hulls.
- (b) All production moulds used for **hull** manufacture shall be approved by the AHPC.

D.3 HULLS

D.3.1 MATERIALS AND CONSTRUCTION

- (a) The **hulls** shall comply with the Building Specification in force at the time of manufacture.

D.4 TRAMPOLINE

D.4.1 MATERIALS AND CONSTRUCTION

- (a) The trampoline shall comply with the Building Specification in force at the time of manufacture.

D.5 ASSEMBLED HULL

D.5.1 FITTINGS

- (a) **Hull** fittings shall comply with the Building Specification in force at the time of manufacture except when altered, added or replaced as permitted by Section C of these **class rules**.

Section E – Hull Appendages

E.1 PARTS

E.1.1 MANDATORY

- (a) **Daggerboards**
- (b) **Rudders**

E.2 GENERAL

E.2.1 RULES

- (a) **Hull appendages** shall comply with the **class rules** in force at the time of **certification**.

E.2.2 MODIFICATIONS, MAINTENANCE AND REPAIR

- (a) **Hull appendages** shall not be altered in any way except as permitted by Section C of these class rules.

E.2.3 MANUFACTURERS

- (a) The **daggerboards**, **rudder** blades and **rudder** stock/tiller shall be made only by a manufacturer licensed by the AHPC to produce these.

E.3 DAGGERBOARDS

- E.3.1 The **daggerboards** shall comply with the Building Specification in force at the time of manufacture.

E.4 RUDDER BLADE, RUDDER STOCK AND TILLER

- E.4.1 The **rudder** blades and **rudder** stock/tiller assembly shall comply with the Building Specification in force at the time of manufacture.

Section F – Rig

F.1 PARTS

F.1.1 MANDATORY

- (a) **Mast**
- (b) **Boom**
- (c) Standing **rigging**
- (d) Running **rigging**
- (e) **Bowsprit**

F.2 GENERAL

F.2.1 RULES

- (a) The **spars** and their fittings shall comply with the **class rules** in force at the time of manufacture of the **spar**.
- (b) The standing and running **rigging** shall comply with the current **class rules**.

F.2.2 MODIFICATIONS, MAINTENANCE AND REPAIR

- (a) **Spars** shall not be altered in any way except as permitted by Section C of these **class rules**.

F.2.3 DEFINITIONS

- (a) **MAST DATUM POINT**

The **mast datum point** is the point on the centreline of the **mast** spar on the aft face at the bottom of the mast extrusion.

F.2.4 MANUFACTURER

- (a) **Spars** and their fittings shall be made only by a manufacturer licensed by the AHPC to produce spars.

F.3 MAST

- F.3.1 The mast **spar** and its fittings shall comply with the Building Specification in force at the time of manufacture of the **spar**.

F.3.2 DIMENSIONS

	minimum	maximum
Spinnaker hoist height		8135 mm
Spinnaker halyard bearing surface distance from mast spar		100 mm

F.4 BOOM

- F.4.1 The boom **spar** and its fittings shall comply with the Building Specification in force at the time of manufacture of the **spar**.

F.5 BOWSPRIT

- F.5.1 The **bowsprit** and its fittings shall comply with the Building Specification in force at the time of manufacture of the **spar**.

F.6 STANDING RIGGING

- F.6.1 The **standing rigging** and its fittings shall comply with the Building Specification in force at the time of manufacture.

F.7 RUNNING RIGGING

- F.7.1 The **running rigging** and its fittings shall comply with the Building Specification in force at the time of manufacture.

Section G – Sails

G.1 PARTS

G.1.1 MANDATORY

- (a) Mainsail

G.1.2 OPTIONAL

- (a) Jib
(b) Spinnaker

G.2 GENERAL

G.2.1 RULES

(a) **Sails** shall comply with the **class rules** in force at the time of manufacture.

G.2.2 SAILMAKER

(a) The **sails** shall be made only by a manufacturer licensed by AHPC to produce sails.

G.3 MAINSAIL

G.3.1 CONSTRUCTION

The mainsail shall comply with the Building Specification in force at the time of manufacture of the **sail**.

G.4 JIB

G.4.1 CONSTRUCTION

The jib shall comply with the Building Specification in force at the time of manufacture of the **sail**.

G.5 SPINNAKER

G.5.1 CONSTRUCTION

The spinnaker shall comply with the Building Specification in force at the time of manufacture of the **sail**.

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